

**Amendments to the Claims**

1. (CURRENTLY AMENDED) A semiconductor device having a semiconductor body (22) comprising an active area (7) and a termination structure (16) surrounding the active area, the termination structure comprising a plurality of lateral trenchgate transistor devices (2a to 2d) connected in series and extending from the active area towards a peripheral edge (42) of the semiconductor body, each lateral device comprising a trench (30) having a gate electrode (31) therein separated from the semiconductor body by a layer (32) of gate insulating material, the trenches, gate electrodes and layers of gate insulating material of the lateral devices being formed in the same respective process steps as trenches (20), insulated electrodes (11) therein and layers (25) of material insulating the insulated electrodes of devices in the active area, the gate electrodes (31) of the lateral devices extending through a region (15) of a first conductivity type, and part way through an underlying region (14a) of a second, opposite conductivity type, with each lateral device including an electrically conductive connection (8,23) between its gate electrode (31) and the first conductivity type region (15) at the side of the lateral device closer to the active area, such that a voltage difference between the active area and the peripheral edge is distributed across the lateral devices.

2. (CURRENTLY AMENDED) A semiconductor device of Claim 1 wherein the active area (7) comprises devices having a region (15) of the first conductivity type which is formed in the same process step as the first conductivity type region (15) of the lateral devices.

3. (CURRENTLY AMENDED) A semiconductor device of ~~Claim 1 or~~ ~~Claim 2~~Claim 1 wherein the insulated electrodes of the active area devices are gate electrodes (11) of trench-gate transistor devices, and the first conductivity type region of the active area devices forms a channel-accommodating region (15) thereof.

4. (CURRENTLY AMENDED) A semiconductor device of ~~Claim 1 or~~ ~~Claim 2~~Claim 1 wherein the

insulated electrodes of the active area devices are trenched electrodes (60) of Schottky rectifiers.

5. (CURRENTLY AMENDED) A semiconductor device of ~~any~~ ~~preceding~~Claim 1 wherein the layer of insulating material (32) is thicker over the bottom of the trenches (30) of the lateral devices (2a to 2d) than over at least a

portion of the sidewalls of said trenches.

6. (CURRENTLY AMENDED) A semiconductor device of ~~any~~  
~~preceding Claim~~ Claim 1 wherein the doping level of a respective portion (50) of the  
region (14a) of second conductivity type adjacent the bottom of each of the gate  
trenches (30) of the lateral devices is higher than that of the remainder of the second  
conductivity type region.

7. (CURRENTLY AMENDED) A semiconductor device of ~~any~~  
~~preceding Claim~~ Claim 1 wherein the semiconductor body (22) is rectangular in the  
plane of the body, and the connections (8,23) are provided towards one or more  
corners of the body.

8. (CURRENTLY AMENDED) A method of forming a semiconductor  
device having a semiconductor body (22) comprising an active area (7) and a  
termination structure (16) surrounding the active area, the termination structure  
comprising a plurality of lateral trench-gate transistor devices (2a to 2d) connected in  
series and extending from the active area towards a peripheral edge (42) of the  
semiconductor body, each lateral device comprising a trench (30) having a gate  
electrode (31) therein separated from the semiconductor body by a layer of gate  
insulating material (32), the gate electrodes of the lateral devices extending through a  
region of a first conductivity type (15), and part way through an underlying region  
(14a) of a second, opposite conductivity type, with each lateral device including an  
electrically conductive connection (8,23) between its gate electrode (31) and the first  
conductivity type region (15) at the side of the lateral device closer to the active area,  
such that a voltage difference between the active area (7) and the peripheral edge (42)  
is distributed across the lateral devices, the method comprising forming the trenches  
(30), gate electrodes (31) and layers of gate insulating material (32) of the lateral  
devices in the same respective process steps as trenches (20), insulated electrodes (11)  
therein and layers (25) of material insulating the insulated electrodes of devices in the  
active area (7).

9. (CURRENTLY AMENDED) A method of Claim 8 comprising  
forming a region (15) of the first conductivity type in devices of the active area (7) in  
the same process step as the first conductivity type region (15) of the lateral devices.